Ex. 1

UCLA Health

COVID-19 Vaccine: Addressing Concerns

There is a lot of information — and misinformation — out there about coronavirus and the COVID-19 vaccine, and it can be difficult to know where to go to get answers to common questions.

The below information specifically addresses concerns about the COVID-19 vaccines. This information is backed by science and reviewed by UCLA Health experts in infectious diseases, internal medicine, and other medical specialties.

You can find more information on the main coronavirus page and the vaccine info hub.

Please talk to your primary care physician if you have questions specific to your care.

En Español:
La información en esta pagina trata específicamente las preocupaciones sobre las vacunas COVID-19. Esta información está respaldada por la ciencia y revisada por expertos de UCLA Health en enfermedades infecciosas, medicina interna y otras especialidades médicas. Haga clic en el botón de abajo para leer en español.

Leer en español

Is the COVID-19 vaccine safe?

The FDA has confidently said that the COVID-19 vaccines are safe. Both the Pfizer and Moderna vaccines have full FDA approval for certain age groups. The FDA authorized the Novavax vaccine for emergency use.

Please note that the J&J/Janssen COVID-19 vaccine, a viral vector vaccine, has expired and is no longer available for use in the United States as of May 6, 2023.

We understand there may be skepticism about the COVID-19 vaccine, especially among people of color, because of historical medical racism and experimentation in people of color. The COVID-19 clinical trials included people of all racial and ethnic backgrounds, and the vaccines were found to be safe and effective for all participants.

Can I get COVID-19 from the vaccine?

No. You cannot become infected with SARS-CoV-2, the virus that causes COVID-19, from any of the vaccines.

The COVID-19 vaccines…

- Do not contain the virus that causes COVID-19.
- Cannot give you COVID-19.
- **Do not** affect your DNA.
- Do not contain eggs, preservatives or mercury.
- Mild side effects are common after vaccination as the body produces antibodies. This is not a sign of infection. These are signs that the body is building protection from the virus and will only last a few days.

Can the COVID-19 vaccine alter my DNA?

No. There is no way for the COVID-19 vaccine to alter your genetic material (DNA).

The Pfizer and Moderna vaccines use messenger RNA (mRNA) technology. RNA is a short-lived, temporary messenger, and it only works in one direction. This means that the RNA does not interact with your DNA and never enters the part of the cell where your DNA is located.

The Novavax COVID-19, adjuvanted vaccine doesn't contain any genetic material, only proteins and another ingredient called an adjuvant. These components teach your immune system how to recognize and respond quickly if infected with the actual coronavirus spike protein.

Should I be worried about an mRNA vaccine? Is this a new technology?

Messenger RNA (mRNA) vaccine technology, used in the Pfizer and Moderna vaccines, is new, but not unknown. While this is the first time mRNA has been used in a licensed vaccine, the structure and technology have been studied for years. Advancements in biology and chemistry have improved mRNA vaccine safety and efficacy, and it is now thought to be *less* dangerous than other types of vaccines.

Do the COVID-19 vaccines contain aborted fetal cells?

No, the COVID-19 vaccines do not contain aborted fetal cells. However, Johnson & Johnson did use fetal cell lines — not fetal tissue — when developing and producing their vaccine, while Pfizer and Moderna used fetal cell lines to test their vaccines and make sure that they work.

Fetal cell lines are grown in a laboratory and were started with cells from elective abortions that occurred several decades ago in the 1970s-80s. They are now thousands of generations removed from the original fetal tissue. None of the COVID-19 vaccines use fetal cells derived from recent abortions.

We understand this is a sensitive issue, and specifically important to religious communities. We'd like to provide some additional context on this topic. On Jan. 27, the California Catholic Conference noted in an official statement that they support the use of all COVID-19 vaccines, including the Johnson & Johnson vaccine, to prevent the continued spread of COVID-19. Pope Francis also publicly supported COVID-19 vaccination and the Vatican has issued a statement saying it is morally acceptable to receive COVID-19 vaccines that have used cell lines from aborted fetuses in their research and production process.

Was the vaccine made too quickly?

No, the vaccines were not made too quickly. Given the importance of stopping the COVID-19 pandemic, vaccine experts focused their time on developing safe and effective vaccines by using pre-existing vaccine models that have been studied for years.

Each vaccine was developed and tested following the same rules as other medications and vaccines that have been approved for use, such as antibiotics and the flu shot.

Should I be concerned that the government was involved in creating the vaccine?

No. The vaccine was created by expert scientists, not the government. The U.S. government provided money and support to assist in the production and distribution of the vaccine.

The vaccine does not contain a live or whole virus, microchip, or any other harmful items. Each vaccine was developed and tested following the same rules as other medications and vaccines that have been approved for use, such as antibiotics and the flu shot.

Can the COVID-19 vaccine cause infertility or sterility?

No. There's absolutely no evidence that the vaccine interferes with fertility or pregnancy.

The vaccine includes only one protein of the virus, which causes your immune system to respond against it. This is something our bodies are used to — it happens every day.

Can the COVID-19 vaccine cause autoimmune problems in the future?

There is no evidence that the COVID-19 vaccine will cause autoimmune problems. The immune response caused by the vaccine only targets the spike protein of the virus, not the other cells in your body.

Why is there a new focus on vaccinating Black, Latino, and Indigenous people? Do they want to use us as "guinea pigs?"

No. The vaccines were rolled out in an equitable and orderly way. However, additional vaccine educational outreach is being made to communities of color to help stop the high rates of COVID-19 infection, hospitalizations, and death seen in Black, Latino, and Indigenous people.

The US has a history of medical racism and unethical experimentation on people of color. The National Research Act of 1974 outlawed unethical human experimentation on people of color and other vulnerable groups.

The COVID-19 vaccines were created by people of diverse backgrounds and reviewed by leading doctors and scientists of color, including the president of Meharry School of Medicine. The vaccines were tested in people of different racial and ethnic backgrounds and was found to be safe and effective.

The COVID-19 vaccines have been endorsed by the National Medical Association and the National Hispanic Medical Association, the country's leading organizations of Black and Latino doctors.

What do I need to know about myocarditis related to the COVID-19 vaccine?

Myocarditis is an inflammation of the heart that can occur after infections, including viral illnesses. A small number of adolescents and young adults reported experiencing mild heart problems after receiving a mRNA COVID-19 vaccine (Pfizer and Moderna), that turned out to be myocarditis.

- These patients were predominately male, especially in younger age groups
- More cases were reported after the second dose than the first dose
- Symptoms usually developed within 2-3 days of vaccination

The CDC is currently evaluating the data on myocarditis to assess the benefits versus the risks. They continue to recommend COVID-19 vaccines for everybody 6 months and older. The CDC recommends that young male patients consider waiting 8 weeks before the 1st and 2nd doses of the primary series in order to reduce the potential risk of myocarditis.

What about the variants?

There are several SARS-CoV-2 variants that scientists are actively tracking. The good news? The updated, single-dose vaccines still offer significant protection against circulating variants.

An FDA advisory group met on June 15, 2023, to discuss COVID-19 vaccinations and additional strains of the COVID-19 virus. The result was a recommendation to update COVID-19 vaccines for use by the fall of 2023 to give protection against the Omicron strain XBB.1.5. Approved by the U.S. Food and Drug Administration on Sept. 11, 2023 and recommended by the CDC on Sept. 12, the newly formulated COVID-19 vaccine targets a more recent variant of the virus than earlier vaccines.

The CDC has more information on variants of concern and variants of interest online.